

TABLE 2

CALCULATING LIFE-CYCLE COST OF AMALGAM SEPARATORS.*						
EQUIPMENT VARIABLE	COST (\$)					
	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
Purchased Equipment						
Purchase price	1,000	—†	—	—	—	1,000
Installation‡	150	—	—	—	—	150
Tank, cartridge replacement§	—	50	50	50	50	200
Inspection¶	23	24	24	24	24	119
Maintenance#	3	6	6	6	6	27
Recycling preparation**	3	3	3	3	3	15
Recycler fees††	50	50	50	50	50	250
TOTAL	1,229	133	133	133	133	1,761
Leased Equipment						
Annual lease fee	500	500	500	500	500	2,500
Installation‡	150	—†	—	—	—	150
Tank, cartridge replacement§	—	—	—	—	—	—
Inspection¶	23	24	24	24	24	119
Maintenance#	3	6	6	6	6	27
Recycling preparation**	3	3	3	3	3	15
Recycler fees††	—	—	—	—	—	—
TOTAL	679	533	533	533	533	2,811
<p>* Life-cycle costing, as the name suggests, estimates how much a piece of equipment will cost from the time it is purchased until it is replaced. The authors based the sample calculations on a life expectancy of five years. This calculation considers initial purchasing price, cost of replacement parts, labor cost associated with maintenance and inspection, and so forth. The sample worksheet illustrates both separator purchase and leasing scenarios in present-day U.S. dollar values.</p> <p>† Dash indicates "not applicable."</p> <p>‡ Requiring plumber/electrician services for three hours at \$50/hour.</p> <p>§ Annual cartridge replacement (in the case of leases, included in lease price).</p> <p>¶ Five-minute inspections twice a month by dental assistant at a salary of \$12/hour.</p> <p># Two 15-minute maintenance sessions a year by dental assistant at a salary of \$12/hour.</p> <p>** Preparing recycling once a year (about 15 minutes by dental assistant at a salary of \$12/hour).</p> <p>†† Some manufacturers bundle recycling costs into purchase price.</p>						

office maintenance costs (labor).

When evaluating costs, buyers often overlook the cost of replacement parts. Dentists should be sure to ask about these, as well as request an estimated replacement schedule. For many systems, replacement cartridges can be up to 20 to 25 percent of the initial unit price. In addition, one should recognize that the frequency of replacement and, therefore, the cost of parts and maintenance will depend, in part, on each practice's patient load and the number of amalgam

restorations that are placed or removed. Although the manufacturer can estimate these figures, dentists need to consider factors specific to their own practices to more accurately predict the cost of a system.

Practitioners should assign a cost to the hours that will be required to monitor and maintain the separator. For example, determine which staff member will be responsible for cleaning the trap and performing any maintenance of the unit, estimate the number of hours per week or month he